Search results
SN 09/911,132
PN 18

L Number	Hits	Search Text	DB	Time stamp
1	235	(((multiple or several or different or many or independent) adj (transformant or transformation)) same (resistance or selection)) and ((high or increased or efficient) adj3 (express or expression))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/27 07:49
2	349	(((multiple or several or different or many or independent) adj3 (transformant or transformation)) same (resistance or selection)) and ((high or increased or efficient) adj3 (express or expression))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/27 07:52
3	42	(alkaline adj phosphatase) same (express or expression) and ((((multiple or several or different or many or independent) adj3 (transformant or transformation)) same (resistance or selection)) and ((high or increased or efficient) adj3 (express or expression))) and yeast	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/27 07:53
4	86	(((multiple or several or different or many or independent) adj3 (transformant or transformation)) same (resistance or selection)) and ((high or increased or efficient) adj3 (express or expression) same yeast)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/27 07:52
5	8	(alkaline adj phosphatase) same (express or expression) and ((((multiple or several or different or many or independent) adj3 (transformant or transformation)) same (resistance or selection)) and ((high or increased or efficient) adj3 (express or expression) same yeast))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/27 07:55
6	141	(transformation or transformants) same yeast same alkaline adj phosphatase	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/27 07:57
7	33	(transformation or transformants) adj10 alkaline adj phosphatase	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/27 07:56
8	1	(transformation or transformants) adj10 alkaline adj phosphatase same yeast	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/27 07:56
9	27	(transformation or transformants) adj10 alkaline adj phosphatase and yeast	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/27 07:56
10	24	((transformation or transformants) same yeast same alkaline adj phosphatase) and (express or expression) adj20 alkaline adj phosphatase	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/27 07:58
11	8	eukaryotic adj3 alkaline adj phosphatase	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/27 07:58
12	173	(bovine or eukaryotic) adj5 alkaline adj phosphatase	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/27 07:59

13	7	(bovine or eukaryotic) adj5 alkaline adj phosphatase same yeast	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/27 08:00
14	3833	yeast adj10 expression adj system	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/27 08:01
15	0	yeast adj10 expression adj system and (mulitple adj transformation)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/27 08:01
16	6	yeast adj10 expression adj system and (multiple adj transformation)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/27 08:02
17	535	yeast adj10 expression adj system and multiple adj (transformation or copy or copies)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/27 08:04
18	77	(yeast adj10 expression adj system and multiple adj (transformation or copy or copies)) and eukaryotic adj5 gene	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/27 08:04
19	71	eukaryotic same yeast adj10 expression same multiple adj (transformation or copy or copies)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/27 08:09
20	67	eukaryotic adj5 gene same yeast adj10 expression same multiple adj (transformation or copy or copies)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/27 08:05
21	4	(eukaryotic same yeast adj10 expression same multiple adj (transformation or copy or copies)) not (eukaryotic adj5 gene same yeast adj10 expression same multiple adj (transformation or copy or copies))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/27 08:08
22	1	producing adj10 eukaryotic same yeast same multiple adj (transformation or copy or copies)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/27 08:10
23	4103	yeast same multiple adj3transformations	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/27 08:10
24	24	yeast same multiple adj3 transformations	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/27 08:12
25	1771	method adj10 expression adj10 yeast	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/27 08:13
26	0	method adj10 expression adj10 yeast same gene adj copy	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/27 08:14

27	14124	method adj10 expression adj10 yeast and (increased or multiple or high) copy adj number	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/27 08:15
28	80	method adj10 expression adj10 yeast and (increased or multiple or high) adj5 copy adj number	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/27 08:15
29	73	method adj5 expression adj10 yeast and (increased or multiple or high) adj5 copy adj number	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/27 08:16
30	4	(eukaryotic same yeast adj10 expression same multiple adj (transformation or copy or copies)) not (eukaryotic adj5 gene same yeast adj10 expression same multiple adj (transformation or copy or copies))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/27 08:16
31	70	method adj5 expression adj10 yeast and (increase or multiple or high) adj5 copy adj number	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/27 08:17
32	70	(method adj5 expression adj10 yeast and (increase or multiple or high) adj5 copy adj number) not (eukaryotic adj5 gene same yeast adj10 expression same multiple adj (transformation or copy or copies))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/27 08:20
33	69	((method adj5 expression adj10 yeast and (increase or multiple or high) adj5 copy adj number) not (eukaryotic adj5 gene same yeast adj10 expression same multiple adj (transformation or copy or copies))) and (tranform or transformation or transforming)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/27 08:27
34	38	((method adj5 expression adj10 yeast and (increase or multiple or high) adj5 copy adj number) not (eukaryotic adj5 gene same yeast adj10 expression same multiple adj (transformation or copy or copies))) and (tranform or transformation or transforming) same (marker)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/27 08:22
35	10	(((method adj5 expression adj10 yeast and (increase or multiple or high) adj5 copy adj number) not (eukaryotic adj5 gene same yeast adj10 expression same multiple adj (transformation or copy or copies))) and (tranform or transformation or transforming) same (marker)) and alkaline adj phosphatase	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/27 08:22
36	8	((method adj5 expression adj10 yeast and (increase or multiple or high) adj5 copy adj number) not (eukaryotic adj5 gene same yeast adj10 expression same multiple adj (transformation or copy or copies))) and (transform or transformation or transforming) same (two or second) adj10 marker	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/27 08:28
37	0	(transform or transformation or transforming) same (two or second) adj10 marker same (high or ncrease or increased or efficient) adj5 expression adj5 yeast	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/27 08:29
38	1	(transform or transformation or transforming) same (two or second) adj10 marker same (high or increase or increased or efficient) adj5 expression adj5 yeast	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/27 08:29

39	13	(transform or transformation or transforming) same (two or second) adj10 marker and (high or increase or increased or efficient) adj5 expression adj5 yeast	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/27 08:34
40	0	marker same increasing adj5 (drug or concentration) same yeast same copy adj number	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/27 08:35
41	15	marker same increasing adj5 (drug or concentration) and yeast same copy adj number	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/27 08:38
42	3511	marker same (increasing adj5 (drug or concentration) or amplifiable) and yeast same copy adj number and alkaline adj phosphatase or (two or second) adj marker	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/27 08:39
43	38	marker same (increasing adj5 (drug or concentration) or amplifiable) and yeast same copy adj number and (alkaline adj phosphatase or (two or second) adj marker)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/27 08:46
47	0	method adj10 alkaline adj phosphatase adj5 expression same eukaryotic	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/27 08:47
48	3	method same alkaline adj phosphatase adj5 expression same eukaryotic	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/27 08:49
49	1	(human or bovine) adj10 alkaline adj phosphatase adj5 expression same eukaryotic	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/27 08:49
50	39	(human or bovine) adj10 alkaline adj phosphatase adj5 expression	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/27 08:50

FILE 'HOME' ENTERED AT 10:06:28 ON 27 AUG 2003

=> file medline caplus
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'MEDLINE' ENTERED AT 10:06:38 ON 27 AUG 2003

FILE 'CAPLUS' ENTERED AT 10:06:38 ON 27 AUG 2003

=> s alkaline (A) phosphatase
L1 100771 ALKALINE (A) PHOSPHATASE

=> s (bovine or hyman or eukaryotic) (5A) alkaline (A) phosphatase
L2 479 (BOVINE OR HYMAN OR EUKARYOTIC) (5A) ALKALINE (A) PHOSPHATASE

=> s l2 and express or produce (S) yeast
L3 3318 L2 AND EXPRESS OR PRODUCE (S) YEAST

=> s l2 and (express or produce (S) yeast)
L4 0 L2 AND (EXPRESS OR PRODUCE (S) YEAST)

=> s (express or produce (S) yeast) and (amplifiable (A) marker)
L5 4 (EXPRESS OR PRODUCE (S) YEAST) AND (AMPLIFIABLE (A) MARKER)

=> d ibib abs 1-4

L5 ANSWER 1 OF 4 MEDLINE on STN
ACCESSION NUMBER: 2002133906 MEDLINE
DOCUMENT NUMBER: 21823394 PubMed ID: 11834126
TITLE: High-level expression of human thyroid-stimulating hormone in Chinese hamster ovary cells by co-transfection of dicistronic expression vectors followed by a dual-marker amplification strategy.
AUTHOR: Peroni Cibele N; Soares Carlos R J; Gimbo Elizabeth; Morganti Ligia; Ribela Maria Teresa C P; Bartolini Paolo
CORPORATE SOURCE: Biotechnology Department, National Nuclear Energy Commission (IPEN-CNEN), Travessa R-400, Cidade Universitaria, 05508-900, Sao Paulo, SP, Brazil.
SOURCE: BIOTECHNOLOGY AND APPLIED BIOCHEMISTRY, (2002 Feb) 35 (Pt 1) 19-26.
Journal code: 8609465. ISSN: 0885-4513.
PUB. COUNTRY: England: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200205
ENTRY DATE: Entered STN: 20020301
Last Updated on STN: 20020502
Entered Medline: 20020501

AB The utilization of dicistronic mRNA expression vectors, containing the gene of interest upstream of an **amplifiable marker** gene, has shown success in rapidly, efficiently and reproducibly obtaining stable cell lines that **express** high levels of the protein of interest. For this reason, human thyroid-stimulating hormone (hTSH), a heterodimeric glycoprotein composed of non-covalently linked alpha- and beta-subunits, was expressed in Chinese hamster ovary (CHO) cells using a system based on dicistronic expression vectors. These contained the genes of interest and the amplifiable gene markers dihydrofolate reductase (DHFR) and adenosine deaminase (ADA), separated by an internal ribosome entry site isolated from the encephalomyocarditis virus. After the cells (CHO-DHFR-) had been co-transfected with the expression vectors and submitted to gene amplification in culture medium containing stepwise increments of methotrexate, it was possible to isolate clones that presented a secretion level of up to 7.2+/-1.3 microg/10(6) cells per day, the highest ever reported for the expression of this glycoprotein hormone. A second treatment, involving the utilization of deoxycoformycin, directed to amplify the ADA marker gene, provided a clone with an additional 2-3-fold increase in hTSH secretion, reaching a secretion level of 17.8+/-7.6 microg/10(6) cells per day. Cell culture and hTSH production in a hollow-fibre bioreactor were set up in order to carry out a preliminary physico-chemical, immunological and biological characterization of this hormone in comparison with pituitary-extracted hTSH (from the National Institute of Diabetes and Digestive and Kidney Diseases) and the only recombinant hTSH now available (Thyrogen). The availability of recombinant hTSH is very important in the diagnosis and

therapy of thyroid carcinoma, via stimulation of radioiodine uptake.

L5 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:354032 CAPLUS
DOCUMENT NUMBER: 136:351379
TITLE: Expression constructs comprising multiple units of promoter linked to exon and unpaired splice sequence and uses for improved gene expression
INVENTOR(S): Harrington, John J.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 43 pp., Cont. of U.S. Ser. No. 414,369, abandoned.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002055172	A1	20020509	US 2000-729416	20001205

PRIORITY APPLN. INFO.: US 1999-414369 B1 19991007
AB The present invention is directed to improved methods for gene expression using genetic vectors with at least two units, each unit comprising multiple promoters operably linked to an exon and unpaired splice sequence. Multiple promoter/exon units, which produce multiple RNA transcripts, are used in nucleic acid constructs to provide increased expression of a desired nucleic acid sequence. The sequence is introduced into a vector by conventional cloning or is expressed from an endogenous sequence in the genome that is activated by the vector contg. the multiple promoters. The vectors can be used to **express** cDNA clones, genes encoded by genomic DNA or fragments, activate endogenous genes in situ, and modify gene or protein of interest.

L5 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:201542 CAPLUS
DOCUMENT NUMBER: 136:354224
TITLE: High-level expression of human thyroid-stimulating hormone in Chinese hamster ovary cells by co-transfection of dicistronic expression vectors followed by a dual-marker amplification strategy
AUTHOR(S): Peroni, Cibele N.; Soares, Carlos R. J.; Gimbo, Elizabeth; Morganti, Ligia; Ribela, Maria Teresa C. P.; Bartolini, Paolo
CORPORATE SOURCE: Biotechnology Department, National Nuclear Energy Commission (IPEN-CNEN), Sao Paulo, 05508-900, Brazil
SOURCE: Biotechnology and Applied Biochemistry (2002), 35(1), 19-26
CODEN: BABIEC; ISSN: 0885-4513
PUBLISHER: Portland Press Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The utilization of dicistronic mRNA expression vectors, contg. the gene of interest upstream of an **amplifiable marker** gene, has shown success in rapidly, efficiently and reproducibly obtaining stable cell lines that **express** high levels of the protein of interest. For this reason, human TSH (hTSH), a heterodimeric glycoprotein composed of non-covalently linked .alpha.- and .beta.-subunits, was expressed in Chinese hamster ovary (CHO) cells using a system based on dicistronic expression vectors. These contained the genes of interest and the amplifiable gene markers dihydrofolate reductase (DHFR) and adenosine deaminase (ADA), sepd. by an internal ribosome entry site isolated from the encephalomyocarditis virus. After the cells (CHO-DHFR-) had been co-transfected with the expression vectors and submitted to gene amplification in culture medium contg. stepwise increments of methotrexate, it was possible to isolate clones that presented a secretion level of up to 7.2.+-.1.3 .mu.g/106 cells per day, the highest ever reported for the expression of this glycoprotein hormone. A second treatment, involving the utilization of deoxycoformycin, directed to amplify the ADA marker gene, provided a clone with an addnl. 2-3-fold increase in hTSH secretion, reaching a secretion level of 17.8.+-.7.6 .mu.g/106 cells per day. Cell culture and hTSH prodn. in a hollow-fiber bioreactor were set up in order to carry out a preliminary physico-chem., immunol. and biol. characterization of this hormone in comparison with pituitary-extd. hTSH (from the National Institute of Diabetes and Digestive and Kidney Diseases) and the only recombinant hTSH now available (Thyrogen). The availability of recombinant hTSH is very important in the diagnosis and therapy of thyroid carcinoma, via stimulation of radio-iodine uptake.
REFERENCE COUNT: 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1987:418844 CAPLUS
DOCUMENT NUMBER: 107:18844
TITLE: Use of the Escherichia coli gene for asparagine synthetase as a selective marker in a shuttle vector capable of dominant transfection and amplification in animal cells
AUTHOR(S): Cartier, Mireille; Chang, Mildred W. M.; Stanners, Clifford P.
CORPORATE SOURCE: Cancer Cent., McGill Univ., Montreal, QC, H3G 1Y6, Can.
SOURCE: Molecular and Cellular Biology (1987), 7(5), 1623-8
CODEN: MCEBD4; ISSN: 0270-7306
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A new dominant amplifiable selective system for use in bacterium-animal cell shuttle vectors was developed by the insertion of a 2-kilobase genomic fragment contg. the cloned E. coli gene for asparagine synthetase (AS) into the pBR322-simian virus 40 recombinant vector pSV2 so as to place the translational initiator codon for the bacterial AS about 1,000 base pairs downstream from the simian virus 40 early promoter. This new construct, pSV2-AS, retains bacterial sequences for transcriptional and translational initiation and so can **express** AS in bacteria. The construct can also complement AS- mutants of mammalian cells, giving AS+ transfectants capable of growth in medium lacking asparagine, with relatively high efficiency (about 300 colonies per .mu.g of DNA per 106 cells exposed). The vector can be amplified up to 100-fold in such AS+ transfectants by selection in asparagine-free medium contg. increasing concns. of the AS inhibitor .beta.-aspartyl hydroxamate. AS+ transfectants were found to be much more resistant to a second AS inhibitor, Albizziin, than were normal AS+ animal cell lines. This difference, which may indicate a strong resistance of the bacterial AS enzyme to Albizziin, was exploited to develop an effective selection for bacterial AS transfectants of a no. of wild-type AS+ cell lines of rat, Chinese hamster, mouse, and human origin. LR-73 cells, a Chinese hamster AS+ cell line, were transfected with pSV2-AS with an efficiency of about 1,000 colonies per 0.5 .mu.g of DNA per 106 cells. The integrated construct in these cells was amplified by incubation of the transfectants in increasing concns. of .beta.-aspartyl hydroxamate. Advantages and disadvantages of this new dominant, selectable, and **amplifiable marker** over markers commonly used in shuttle vectors are discussed.

=> s (express or produce (S) yeast) and (multiple (5A) marker)
L6 70 (EXPRESS OR PRODUCE (S) YEAST) AND (MULTIPLE (5A) MARKER)

=> s (express or produce (S) yeast) and (multiple (5A) marker) (S) increase (S) (copy or gene)
L7 0 (EXPRESS OR PRODUCE (S) YEAST) AND (MULTIPLE (5A) MARKER) (S) INCREASE (S) (COPY OR GENE)

=> s (express or produce (S) yeast) and (multiple (5A) marker) and increase (S) (copy or gene)
L8 0 (EXPRESS OR PRODUCE (S) YEAST) AND (MULTIPLE (5A) MARKER) AND INCREASE (S) (COPY OR GENE)